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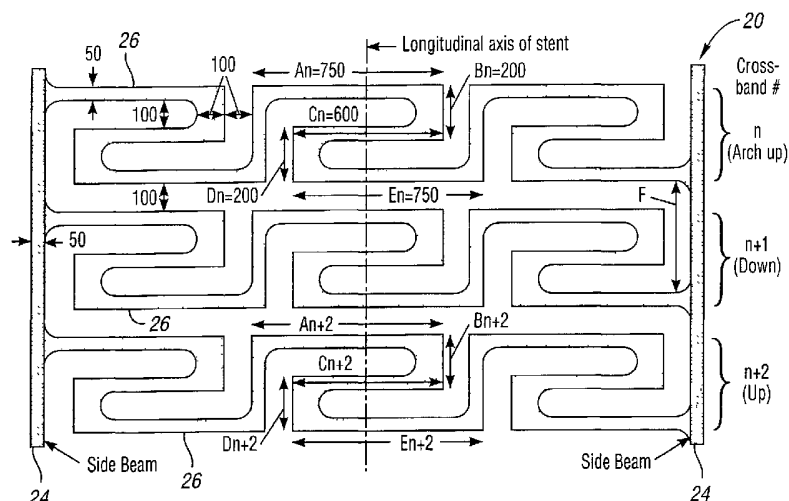
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,

[Continued on next page]

(54) Title: ASSEMBLY AND PLANAR STRUCTURE FOR USE THEREIN WHICH IS EXPANDABLE INTO A 3-D STRUCTURE SUCH AS A STENT AND DEVICE FOR MAKING THE PLANAR STRUCTURE



(57) Abstract: An assembly and planar structure for use therein which is expandable into a 3-D structure such as a stent and device for making the planar structure are provided. The planar structure permits the use of planar batch manufacturing technologies to fabricate coronary artery stents. Stents with different wall patterns are fabricated from 50 μ m thick stainless foil using micro-electro-discharge machining, and expanded to tubular shapes by using angioplasty balloons. The stents are free-standing. The free-standing stents exhibit diameter variations of $< \pm 4\%$, almost zero radial recoil after deflation of the balloon, and longitudinal shrinkage of $< 3\%$ upon expansion. A variation of the stents uses breakable links (78) to provide additional customization of electrical and mechanical properties. Loading tests reveal that the radial strengths match commercially available stents, while longitudinal compliance, at 0.02 m/N for a 4 mm long section of the stent, is substantially higher.



- PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61F2/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 086 604 A (FISCHELL ROBERT E ET AL) 11 July 2000 (2000-07-11) column 3, line 1 - line 19 figures 4-6	1,27,30
A	US 2002/156525 A1 (BROWN BRIAN ET AL) 24 October 2002 (2002-10-24) paragraph '0009! paragraph '0011! paragraph '0032! - paragraph '0033! figures 3-3E	1,27,30
A	US 2002/179573 A1 (GIANCHANDANI YOGESH B ET AL) 5 December 2002 (2002-12-05) cited in the application the whole document	30

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☒ Patent family members are listed in annex.

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